

REMARKS

Favorable reconsideration is respectfully requested.

The claims are 22 to 42.

The above amendment is responsive to points set forth in the Official Action.

With regard to the amendment to the specification at page 11, this is responsive to the objection in Official Action paragraph 1.

New claims 22 to 42 are based on previous claims 1 to 21, respectively.

In the new claims, parentheses have been deleted responsive to the rejection on indefiniteness in Official Action paragraph 2.

Claim 1 was rejected under 35 U.S.C. 102(b) as being anticipated by Louis et al. (U.S. 4,426,240).

In reply, in new main claim 22, which replaces previous claim 1, it is now recited that:

- component I is an acrylate. Support for this amendment can be found in the present specification on page 2, lines 34 and 35. This would appear to overcome the rejection under 35 U.S.C. 102(b) over Louis et al.
- the radiation curable composition is placed between the glass panes and then cured.

Support for this amendment can be found in the description on page 9, lines 2 to 5.

These features are neither disclosed nor suggested by the cited Louis reference.

Claims 1, 2 to 5, 7, 9, 12 to 14 and 16 have been rejected under 35 U.S.C. 103(a) as being unpatentable over Nolte et al. (U.S. 4,104,427) in view of Van Den Bergen '826.

This rejection is also respectfully traversed.

Scope and content of the prior art

Nolte et al. (U.S. 4,104,427) discloses glass laminates comprising a layer of intumescent material sandwiched between two outer plies. A plastic layer may be disposed between the glass panes and the intumescent layer in order to inhibit interaction between the intumescent material and the glass pane (col. 4, lines 5 to 16) and this plastic layer may be a plastic material which has been polymerized in situ such as polyurethane (col. 4, lines 23 to 26). The intumescent layers are generally composed of hydrated metal salts (col. 3, lines 30 to 40) and forms a transparent solid layer (col. 3, line 60).

Hence Nolte et al. discloses laminates which comprise 5 separate and distinct layers: 1 central intumescent layer with at each side 1 plastic layer and 1 glass pane. The intumescent layer is distinct from the plastic layer.

Van Den Bergen (WO 01/74826) relates to phosphorous containing acrylated materials which can be used as flame-retardants.

Volkommer et al. (U.S. 4,128,709) relates to the use of acrylate-based polymers and their use as flame proofing agents in thermoplastics.

Differences between prior art and the claims at issue

None of Van Den Bergen and Volkommer disclose or teach to use the flame retardant materials as layers in glass lamination.

The present claims are directed to a method for producing a flame-retardant translucent laminate wherein a radiation curable composition comprising a flame retardant component is deposited between glass panes and cured so that a flame-retardant layer is formed.

Hence this method is unobvious from the Nolte et al. method in that a radiation curable acrylate which already contains the flame retardant component is used.

Nolte does not teach the use radiation curable materials; polyurethanes are obtained from the condensation reaction of isocyanates with alcohols.

The method according to the invention is further distinguished from that of Nolte et al. in that no distinct layer of intumescent material is formed which is separated from the glass panes by a plastic layer.

None of Van Den Bergen or Volkommer suggest to replace the 3-layered structure "plastic layer/intumescent layer/plastic layer" disclosed in Nolte et al. by a single layer obtained from a radiation curable composition comprising the flame-retardant component as in claim 22.

On the contrary, in view of Nolte et al. the one skilled in the art is directed away from the method according to present claim 22 since Nolte et al. clearly teaches that a contact between the intumescent material with a glass may result in deterioration (col. 4, lines 5 to 10).


Hence claims 22 to 42 are not obvious from the cited references, alone or combined.

No further issues remaining, allowance of this application is respectfully requested.

If the Examiner has any comments or proposals for expediting prosecution, please contact undersigned at the telephone number below.

Respectfully submitted,

Hugues VAN DEN BERGEN et al.

By: 
Matthew M. Jacob
Registration No. 25,154
Attorney for Applicants

MJ/aas
Washington, D.C. 20006-1021
Telephone (202) 721-8200
Facsimile (202) 721-8250
October 12, 2007